

Holotype (♂) in the collection of J. W. T. Armstrong, allotype (♀) in the collection of the author.

This species is quite distinct from the other Australian species of the genus, *nodipennis* (Macl.), *denticollis* (Fvl.) and *melbournensis* (Wilson) by reason of its sculpture and the markedly smaller size.

From the material in the British Museum collection it seems that *M. denticollis* (Fvl.) and *M. nodipennis* (Macl.) are conspecific. An examination of Macleay's type would finally settle the matter.

#### Family PAEDERINAE.

##### PAEDERUS ARMSTRONGI, n. sp. (Text-figs. 1 to 3.)

Shining. Head black, pronotum red, elytra blue-black, abdomen black, the eighth segment with at least the basal half red, sometimes wholly red, terminal segment red. Antennae with the first to tenth segments black, sometimes obscurely reddish at base, the eleventh light yellowish-red. Mandibles dark reddish-brown, maxillary palpi with the first to third segments black, the fourth reddish. Femora and tibiae black, tarsi reddish-brown. Length: ca. 11 mm. (with abdomen normally extended).

Head about as long as broad, the post-ocular region about twice as long as the eyes (seen from above), the sides rounded from the posterior margin of the eye to the neck. Surface finely and rather diffusely punctured, the punctures setiferous and somewhat unequal in size. Antennae long and slender, reaching (if extended backwards) to the base of the pronotum, the third segment about twice as long as the second, the fourth to tenth gradually decreasing in length but scarcely increasing in breadth, the fourth about twice as long as broad, the tenth about one and one-quarter times as long as broad, the eleventh nearly twice as long as the tenth, bluntly pointed apically.

Pronotum strongly convex, distinctly broader than head, very slightly longer than broad, broadest at about middle, the sides strongly rounded, the anterior and posterior angles completely rounded. Surface with punctures similar to those on head.

Elytra very short, about one and one-fifth times as broad as long, about as broad as pronotum, the sutural length about two-thirds as long as pronotum, distinctly widened behind, the sides almost straight, the humeral angles rounded. Surface with setiferous punctures which are about as close as those on head and pronotum but distinctly coarser.

Tergites of abdomen with setiferous punctures similar to those on pronotum.

♂.—Apical margin of sternite of the fourth segment slightly emarginate in middle, with a small, indistinct, tubercle on each side of the emargination and a superficial semicircular impression behind it, apical margin of sternite of fifth segment emarginate in middle, the right-hand side of the emargination produced into a more or less straight, apically truncate process which is directed obliquely inwards, the left-hand side produced into a straight pointed tooth with a small tubercle at base internally, behind the emargination with a distinct semicircular impression (Text-fig. 2). Sternite of the eighth segment with a deep, narrow, parallel-sided, median excision, the edges of which are bordered. Aedeagus with the median lobe asymmetrical, as in Text-figure 3.

New South Wales: Mount Irvine, 2 ex., including holotype (J. W. T. Armstrong), Megalong, 3 ex. (J. W. T. Armstrong), Mount Wilson, 1 ex. (Olliff).

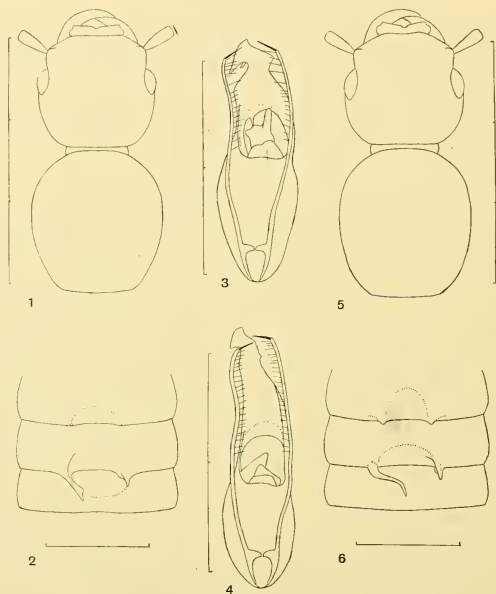
Holotype (♂), allotype (♀), and one paratype in the collection of J. W. T. Armstrong, two paratypes in the collection of the author, one paratype in the collection of the N.S.W. Department of Agriculture.

*Paederus armstrongi* is very similar to *P. sparsus* Fvl. (Text-figs. 4 to 6), but differs in the smaller eyes, the shorter, more rounded pronotum, the slightly closer puncturation on all parts and the red apex of the abdomen, as well as in the male secondary sexual characters and the aedeagus. As *P. sparsus* was described from a unique female and neither the male secondary characters nor the aedeagus have since been described, descriptions and figures of these are given here.

The sternites of the fourth and fifth abdominal segments show similar modifications to those of *armstrongi*, but, on the fourth, the lateral tubercles are more distinct and

the impression is half oval and, on the fifth, the right-hand side of the emargination is produced into a sinuate, apically pointed, inwardly directed process, the left-hand side is similar to *armstrongi*. The sternite of the eighth segment is identical with that of *armstrongi*, and the aedeagus, which also has the median lobe asymmetrical, is as in Text-figure 4.

*P. armstrongi* and *P. sparsus* are the only species of *Paederus* known to me which show such modifications of the sternites of the fourth and fifth abdominal segments. The modification of the sternite of the eighth segment is normal and is practically constant throughout the genus.



Text-figures 1-6.

1. *Paederus armstrongi*, n. sp., head and pronotum (scale = 3 mm.). 2. *P. armstrongi*, n. sp., sternites of 4th-6th abdominal segments (scale = 1 mm.). 3. *P. armstrongi*, n. sp., aedeagus (scale = 2 mm.). 4. *P. sparsus* Fvl., head and pronotum (scale = 3 mm.). 5. *P. sparsus* Fvl., sternites of 4th-6th abdominal segments (scale = 1 mm.). 6. *P. sparsus* Fvl., aedeagus (scale = 2 mm.).

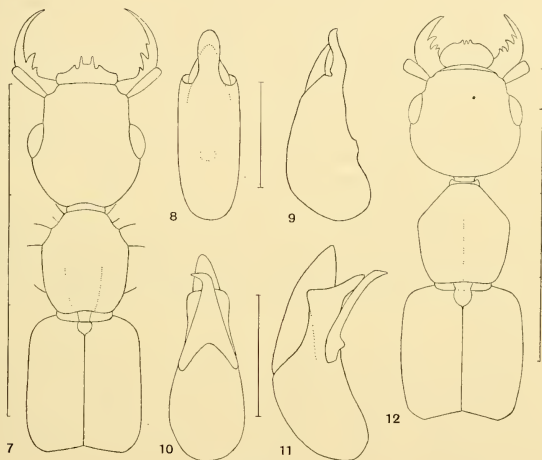
*DIBELONETES RUFONIGER*, n. sp. (Text-figs. 7-9.)

Rather dull. Head and abdomen black, pronotum red, elytra with the basal half black, the rest red, the two colours sharply differentiated. Antennae and mouthparts yellowish-red. Femora yellowish-red, darker apically, tibiae with about apical third yellowish-red, the rest darker, tarsi yellowish-red, the anterior legs (on the only specimen seen) have less darkening than the others. Length: 5.8 mm.

Head very slightly longer than broad, the eyes moderate and rather prominent, the ante-ocular region very slightly (about one and one-sixth times) longer than the eyes (as seen from above), with the sides almost straight, the post-ocular region a little less than one and one-half times as long as the eyes, distinctly broader immediately behind eyes than the ante-ocular portion, the sides rounded to the neck, the posterior angles obsolescent. Surface with close, rather large, irregularly shaped, umbilicate punctures, the intervals between the punctures forming a raised, irregular network,

with a few long setae towards sides. Antennae moderate, reaching (if extended backwards) a little beyond base of pronotum, the first segment as long as the next two together, the second short, longer than broad, the third distinctly longer, rather more than one and one-half times as long as the second, the fourth to tenth about equal in breadth, about as broad as the third, but decreasing gradually in length, the fourth only slightly shorter than the third, the tenth scarcely more than half as long as the third, all the segments longer than broad, the eleventh distinctly longer than the tenth, bluntly pointed apically.

Pronotum longer (about one and one-fifth times) than broad, broadest in front of middle, narrowed in front of widest point to neck with the sides slightly angulate, slightly narrowed behind, with the sides lightly rounded, the posterior angles rounded, the base shallowly emarginate, the sides somewhat impressed on basal half. Surface with punctures as on head. Scutellum alutaceous, indistinctly punctured.



Text-figures 7-12.

7. *Dibelonetes rufoniger*, n. sp., head and pronotum (scale = 3 mm.). 8. *D. rufoniger*, n. sp., aedeagus, ventral view. 9. *D. rufoniger*, n. sp., aedeagus, lateral view (scale for figs. 8 and 9 = 0.5 mm.). 10. *Stillicoderus aberrans*, n. sp., aedeagus, ventral view. 11. *S. aberrans*, n. sp., aedeagus, lateral view (scale for figs. 10 and 11 = 0.5 mm.). 12. *S. aberrans*, n. sp., head and pronotum (scale = 3 mm.).

Elytra distinctly (about one and one-fifth times) longer than broad, much broader (about one and one-third times) than the pronotum, the sutural length about as long as the pronotum, the sides more or less parallel, the humeral and posterior angles rounded, sutural angles obtuse so that the joint base is emarginate. Surface rather closely, indistinctly, granulate, each granule bearing a small setiferous puncture.

Tergites of abdomen finely, moderately closely, superficially punctured, the punctures setiferous. Surface distinctly alutaceous between the punctures.

♂.—Apical margin of sternite of the eighth segment emarginate in the middle, aedeagus as in Text-figures 8, 9.

New South Wales: Acacia Plateau, 1 male (J. W. T. Armstrong).

Type in the collection of J. W. T. Armstrong.

Four Australian species have previously been placed in the genus *Dibelonetes*—*antipodum* Bernh., *brevicollis* Lea, *mjoebergi* Bernh. and *palaeotropicus* Bernh. *D. rufoniger* is markedly different from these in the larger size and the coloration. The